

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

re application of: Kwan et al.

Attorney Docket No.: DEPYP002C1

Patent: 6,902,584 B2

Issued: June 7, 2005

Title: BONE GRAFTING MATRIX

### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as first-class mail on August 10, 2005 in an envelope addressed to the Commission for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.

# REQUEST FOR CERTIFICATE OF CORRECTION **OF OFFICE MISTAKE**

(35 U.S.C. §254, 37 CFR §1.322)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Attn: Certificate of Correction

Certificate

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of Correction

Dear Sir:

Attached is Form PTO-1050 (Certificate of Correction) at least one copy of which is suitable for printing. The errors together with the exact page and line number where the errors are shown correctly in the application file are as follows:

### **CLAIMS:**

- In line 5 of claim 7 (column 8, line 39) change "cellulose ester" to --cellulose 1. esters--. This appears correctly in Amendment C as filed on April 26, 2004, on page 3, paragraph 1, line 4, as claim 28.
- 2. In line 2 of claim 13 (column 8, line 56) change "a position" to --a composition--. This appears correctly in Amendment C as filed on April 26, 2004 on page 3, paragraph 6, line 2, as claim 36.

3. In line 7 of claim 23 (column 10, line 2) change "polypropylene glycol" to

--polypropylene glycol--. This appears correctly in Amendment C as filed on April 26, 2004, on

page 4, paragraph 9, line 5, as claim 47.

Patentee hereby requests expedited issuance of the Certificate of Correction because the

error lies with the Office and because the error is clearly disclosed in the records of the Office.

As required for expedited issuance, enclosed is documentation that unequivocally supports the

patentee's assertion without needing reference to the patent file wrapper.

It is noted that the above-identified errors were printing errors that apparently occurred

during the printing process. Accordingly, it is believed that no fees are due in connection with

the filing of this Request for Certificate of Correction. However, if it is determined that any fees

are due, the Commissioner is hereby authorized to charge such fees to Deposit Account 500388

(Order No. DEPYP002C1).

Respectfully submitted,

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- 28. (previously presented). A matrix according to claim 26 wherein said binder is selected from the group consisting of soluble collagen, gelatin, polylactic acid, polyglycolic acid, copolymers of lactic and glycolic acid, polycaprolactone, carboxymethylcellulose, cellulose esters, dextrose, dextran, chitostan, hyaluronic acid, ficol, chondroitin sulphate, polyvinyl alcohol, polyacrylic acid, polypropylene glycol, polyethylene glycol, water-soluble polyacrylates and water-soluble polymethacrylates.
- 29. (previously presented) A matrix according to claim 26 wherein said biopolymer fibers comprise fibrillar collagen.
- 30. (previously presented) A matrix according to claim 26 wherein said mineral comprises calcium phosphate.
- 31. (previously presented) A matrix according to claim 26 wherein said mineral comprises hydroxyapatite.
- 32. (previously presented) A matrix according to claim 26 wherein said mineral consists of particles of a diameter of size no greater than about five microns.

Claims 33-35 (cancelled).

Claim 36. (currently amended). A method of bone repair comprising the step of applying a composition comprising a porous, biodegradable, three-dimensionally fixed matrix comprising a bound network of water-insoluble biopolymer fibers[[,]] and mineral, said network bound with a cross-linked binder and a water-soluble binder rendered insoluble by cross-linking wherein said mineral is immobilized within said matrix by said binder[[,]] and said composition is present in an amount effective to promote bone growth at a desired site of bone repair.

- 37. (previously presented) A method according to claim 36 wherein said matrix has shape retention maintainable without fragmentation upon implantation.
- 38. (previously presented) A method according to claim 36 wherein said biopolymer comprises collagen.

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- 39. (previously presented) A method according to claim 36 wherein said binder comprises collagen.
- 40. (previously presented). A matrix according to claim 28 wherein said binder comprises collagen.
- 41. (new) A method according to any one of claims 36 to 39 wherein said composition further comprises a bone growth factor.
- 42. (new) A method according to any one of claims 36 to 39 wherein said composition further comprises bone marrow.
- 43. (new) A method according to claim 41 wherein said composition further comprises bone marrow.
- 44. (new) A method according to claim 41 wherein said composition further comprises autogenous bone.
- 45. (new) A composition for bone repair comprising a porous, biodegradable, three-dimensionally fixed matrix comprising a network of water-insoluble biopolymer fibers and mineral, said network bound with a cross-linked binder wherein said mineral is immobilized within said matrix by said binder.
- 46. (new) A composition according to claim 45 wherein said matrix maintains physical integrity for a period of time of at least about three days after implant into a physiological environment in which bone replacement is occurring.
- 47. (new) A composition according to claim 45 wherein said binder is selected from the group consisting of soluble collagen, gelatin, polylactic acid, copolymers of lactic acid and glycolic acid, polycaprolactone, carboxymethylcellulose, cellulose esters, dextrose, dextran, chitosan, hyaluronic acid, ficol, chondroitin sulfate, polyvinyl alcohol, polyacrylic acid, polypropylene glycol, polyethylene glycol, water-soluble polyacrylates, and water-soluble polymethacrylates.

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(Also Form PT-1050)

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 6,902,584 B2 **DATED** : June 7, 2005 INVENTOR(S): Kwan et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

### In the Claims:

In line 5 of claim 7 (column 8, line 39) change "cellulose ester" to --cellulose esters--.

In line 2 of claim 13 (column 8, line 56) change "a position" to --a composition--.

In line 7 of claim 23 (column 10, line 2) change "polypropylene glycol" to --polypropylene glycol--.

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